

Amendment to the Claims:

1. (Cancelled)

2. (Currently Amended) A magnetic resonance imaging apparatus as claimed in claim [[1]] 3, in which the a length of the each lead segment is in the range of from $\lambda/4$ to $\lambda/8$.

3. (Currently Amended) A magnetic resonance imaging apparatus as claimed in claim 1, comprising:

an accessory device;

a connection lead which is configured to extend through an examination zone of a magnetic resonance imaging system during a magnetic resonance examination procedure in which RF fields are applied in the examination zone, the connection lead including:

a multiplicity of lead segments, each lead segment including two wires,

10 in which the inductive coupling element is a plurality of transformers, a plurality of the transformers including a first winding connected across the wires of one of the lead segments and a second winding connected across the wires of an adjacent lead segment.

4. (Currently Amended) A magnetic resonance imaging apparatus as claimed in claim 3, in which is provided with at least one electrical accessory device for use during the examination of an object, as well as with a connection lead which is to be guided through an examination zone of the magnetic

5 resonance imaging apparatus, which zone can be exposed to an RF field, and which lead is intended to connect the accessory device to a connection unit, at least one lead segment, having a length which is limited by at least one inductive coupling element and is unequal to $n^*\lambda/2$, being connected in the connection lead, where λ denotes the RF wavelength and $n = 1, 2, 3, \dots$, the inductive coupling element being a

- 10 transformer, the transformer [[is]] being formed by a toroid as well as a primary and secondary winding wound thereon.

5. (Currently Amended) A magnetic resonance imaging apparatus as claimed in claim 1, comprising:

a magnetic resonance accessory including at least one RF coil;
a connection lead connected with the accessory and adapted to extend
5 through an examination zone during a magnetic resonance imaging process, the
connection lead including:

10 a plurality of conductive, lead segment loops arranged
end to end, each lead segment loop having a length unequal to $n*\lambda/2$,
where λ connotes RF wavelength of RF signals applied in the
examination zone during the imaging process and n is an integer,
in which the inductive coupling element is a plurality of
inductive coupling conductor loops, each inductive coupling loop
being arranged adjacent a pair of adjacent lead segment loops to
inductively couple the lead segment loops.

6. (Currently Amended) A magnetic resonance imaging apparatus as claimed in claim [[1]] 3, in which the connection lead is a two-wire lead or a coaxial lead.

7. (Currently Amended) A magnetic resonance imaging apparatus as claimed in claim [[1]] 3, in which the inductive coupling element each transformer is bridged by ohmic resistors in order to transfer direct voltage signals via the connection lead.

8. (Currently Amended) A magnetic resonance imaging apparatus as claimed in claim [[1]] 3, in which the inductive coupling element is at least one capacitive element connected with each transformer so as to form a resonant circuit in conjunction with at least one capacitive element, the resonance condition of

5 said resonant circuit being satisfied for the frequency of a signal to be transferred via the connection lead.

9. (Currently Amended) A magnetic resonance imaging apparatus as claimed in claim [[1]] 4, in which the accessory device is an RF body coil or a catheter with a transmission and/or receiving unit.

10. (Currently Amended) A magnetic resonance imaging apparatus as claimed in claim 3, wherein the accessory device includes a body coil which forms an accessory device for use during the magnetic resonance examination of an object, by means of a magnetic resonance imaging apparatus, provided with a
5 the connection lead which is being arranged so as to extend through [[an]] the examination zone of the magnetic resonance imaging apparatus, which zone can and be exposed to [[an]] the RF fields and to connect the body coil to a connection unit, at least one of the lead segments[[,]] having a length which is limited by at least one inductive coupling element and is unequal to $n*\lambda/2$, being connected in the connection
10 lead, where λ denotes the RF wavelength and $n = 1, 2, 3, \dots$

11. (Currently Amended) A magnetic resonance imaging apparatus as claimed in claim 3 wherein the accessory includes a catheter with a transmission and/or receiving unit which forms an accessory device for use during the examination procedure of an object by means of a magnetic resonance imaging apparatus in the examination zone, provided with a
5 the connection lead which is being arranged so as to extend through [[an]] the examination zone of the magnetic resonance imaging apparatus, which zone can be exposed to an RF field, and to connect the transmission and/or receiving unit to a connection unit, at least one of the lead segments, having a length which is limited by at least one inductive coupling element and is unequal to $n*\lambda/2$, being connected in the connection lead, where λ denotes the [[RF]] wavelength of the applied RF fields and $n = 1, 2, 3, \dots$
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12. (New) A magnetic resonance imaging apparatus as claimed in claim 5, wherein the accessory includes an RF coil or a catheter with a transmission and/or receive unit.

13. (New) A magnetic resonance imaging apparatus as claimed in claim 4, wherein each toroidal transformer is bridged by ohmic resistors.

14. (New) A magnetic resonance imaging apparatus as claimed in claim 5, wherein each lead segment loop has a length in a range of $\lambda/4$ to $\lambda/8$.